

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1-3. (cancelled)
4. (previously presented): An isolated antibody or fragment thereof that specifically binds to SEQ ID NO: 3.
5. (previously presented): The antibody or fragment thereof of claim 4, which is a monoclonal antibody.
6. (previously presented): The antibody or fragment thereof of claim 5, wherein the monoclonal antibody is recombinantly produced.
7. (previously presented): The antibody or fragment thereof of claim 4, which is conjugated to an agent.
8. (cancelled)
9. (previously presented): The antibody or fragment thereof of claim 4, wherein the fragment is an Fab, F(ab')₂, Fv or sFv fragment.
10. (previously presented): The antibody or fragment thereof of claim 4, which is a human antibody, a humanized antibody or a chimeric antibody.
11. (cancelled)

12. (currently amended): A hybridoma that produces an antibody ~~or fragment thereof~~ that specifically binds to a protein comprising SEQ ID NO: 3.

13. (previously presented): The antibody or fragment thereof of claim 6, wherein the monoclonal antibody is a single chain monoclonal antibody that immunospecifically binds to a protein comprising SEQ ID NO: 3.

14. (cancelled)

15. (withdrawn): A method of delivering an agent to a cell that expresses 121P1F1 (SEQ ID NO: 3), said method comprising:

providing the agent conjugated to an antibody or fragment thereof of claim 4; and,
exposing the cell to the antibody-agent or fragment-agent conjugate.

16-47. (cancelled)

48. (withdrawn): A method of inhibiting growth of cancer cells that express 121P1F1, comprising:

administering to said cells an antibody or fragment thereof which specifically bind to a 121P1F1 protein (SEQ ID NO: 3).

49. (withdrawn): The method of claim 48 wherein the antibody or fragment thereof is a single chain monoclonal antibody that immunospecifically binds to the 121P1F1 protein.

50-53. (cancelled)

54. (withdrawn): The method of claim 48 of inhibiting growth of cancer cells that express 121P1F1 and a particular HLA molecule, the method comprising steps of:

administering to said cells human T cells, wherein said T cells specifically recognize an 121P1F1 peptide sequence in the context of the particular HLA molecule.

55-77. (cancelled)

78. (previously presented): The antibody or fragment thereof of claim 7, wherein the agent is a diagnostic agent or a cytotoxic agent.

79. (previously presented): The antibody or fragment thereof of claim 78, wherein the cytotoxic agent is selected from the group consisting of radioactive isotopes, chemotherapeutic agents and toxins.

80. (previously presented): The antibody or fragment thereof of claim 79, wherein the radioactive isotope is selected from the group consisting of ^{211}At , ^{131}I , ^{125}I , ^{90}Y , ^{186}Re , ^{188}Re , ^{153}Sm , ^{212}Bi , ^{32}P and radioactive isotopes of Lu.

81. (previously presented): The antibody or fragment thereof of claim 79, wherein the chemotherapeutic agent is selected from the group consisting of taxol, actinomycin, mitomycin, etoposide, tenoposide, vincristine, vinblastine, colchicine, gelonin, and calicheamicin.

82. (previously presented): The antibody or fragment thereof of claim 79, wherein the toxin is selected from the group consisting of diphtheria toxin, enomycin, phenomycin, Pseudomonas exotoxin (PE) A, PE40, abrin, abrin A chain, mitogellin, modeccin A chain, and alpha-sarcin.